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## ON THREE TYPES OF BEHAVIOR

### THE MECHANICAL, THE COERCITIVE (MAGIC) AND THE ANTHROPOPATHIC (INCLUDING RELIGION)<sup>1</sup>

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In his dealings with the different kinds of objects or forces with which he is, or thinks himself, in relation, man has developed three distinct types of behavior. A concrete illustration will bring them before us more forcibly than an abstract characterization. A stoker in the hold of a ship, throwing coal in the furnace, represents one of them. His purpose is to produce propelling energy. The amount of coal he shovels in, together with the air draught, the condition of the boiler and other factors of the same sort, determine, as he understands the matter, the velocity of the ship. The same man, playing cards of an evening, and having lost uninterruptedly for a long time, might get up and walk around the table backwards in order of change his luck. He would then illustrate a second mode of behavior. If a storm threatens to sink the ship, our stoker might be seen falling on his knees, lifting his hands to heaven, and addressing in passionate words an invisible being. These are the three differentiated kinds of responses he has learned to make, the three ways by which he endeavors to make use of the forces about him in his struggle for the preservation and the enrichment of life. We may designate them as—

1. The mechanical behavior.
2. The coercitive behavior, or Magic.
3. The anthropopathic behavior, which includes Religion.

The mechanical behavior differs from the anthropopathic by the absence of any reference to personal beings. In the sphere in which it obtains, threats and presents are equally ineffective. It implies instead the practical—not the theoretical—recognition of a fairly definite and constant quantitative relation between cause and effect. If science is to be provided with an ancestor, and only with one, it should be this first type of behavior rather than Magic. For the moment the existence of the fixed quantitative relations, implicitly acknowl-

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<sup>1</sup>A portion of a little book "The Psychological Origin of Religion", soon to be published by Archibald Constable & Co.

edged in the first type of behavior, is explicitly recognized, science is born. Magic separates itself, on the one hand, from the mechanical behavior by the absence of implied quantitative relations, and, on the other hand, from anthropopathic behavior, by the failure to use means of personal influence; punishment and reward are just as foreign to Magic as to mechanical behavior. As to the anthropopathic type of activity, it includes the ordinary relations of men with men as well as those with gods. One's frame of mind and behavior when dealing with a human person, especially if exalted far above us, resembles Religion so closely that it is proper to place them in the same class.

Mechanical behavior and Religion are, obviously, by far the most common and important modes of activity among civilized peoples, whereas in primitive culture the coercitive behavior (Magic) is everywhere in evidence and Religion may be practically unknown. As one ascends from the lowest stages of culture, Magic gradually loses official recognition. Among us, though it leads only a surreptitious existence, it has by no means lost all influence. The list of magical superstitions that have retained a hold among us would be found tediously long. A numerous class of them includes the gambler's methods of securing luck. So-called 'religious' practices may really be magical. The cross, the rosary, relics, and other accessories of Religion, acquire in the mind of many Christians a power of the coercitive type; that is, for instance, the case when the sign of the cross, of itself, without the mediation of God or Saint, is felt to have power; or when 'saying one's beads' is held to possess a curative virtue of the kind ascribed to sacred relics by the superstitious. And even when the symbolism of the sign of the cross, and the meaning of *Ave Maria* are realized, it happens not infrequently that signing oneself and saying one's beads are regarded as acting upon the Virgin Mary, Jesus Christ, or God, in the manner of incantation, *i. e.*, magically.

It has been the habit of most students of the origin of Religion to concern themselves exclusively with the origin of the god-idea, as if the belief in the existence of gods was identical with Religion. They have ignored its other essential components: the motives or desires and the feelings, as well as the means by which, in Religion, the gratification of desire is sought. But the limitation of the problem of origin to that of the god-idea is not entirely amiss. For there are neither specifically religious motives, nor specifically religious feelings. Any and every human need and longing may, at some stage or other, become a spring of Religion, and conversely the feelings and emotions met with in any form of Religion appear also in

non-religious experience. As to the practical means of securing the favor of the gods, it is agreed that they were at the beginning essentially the same as those men were already in the habit of using in their relations with their fellow-men. It is the Agent or the Power with which man thinks himself in relation, and through whom he endeavors to secure the gratification of his desires, which alone is distinctive of religious life. And so the origin of the idea of gods, though not identical with the origin of Religion, is at any rate its central problem.

In the preceding remarks, as also in practically all writings on the origin of Religion, it is assumed that the god-concept precedes, in the mind of man, the establishment of Religion. This opinion is, as we shall see, the correct one. But it cannot be taken as a matter of course. Actions may become established in other ways. Our first problem is to discover how Religion arose, and what psychological capacities and conceptions it implies.

A comparative study of the three modes of behavior is, after all, the shortest way of gaining a satisfactory understanding of the origin of Religion.

*What are the abstract conceptions necessary to the establishment of the three modes of behavior?*—There is usually little difficulty in determining what end any particular action is intended to secure. It is quite otherwise if one wishes to ascertain the nature of the power from which the desired effect is supposed to proceed. The philosopher, suffering from the illusion to which his class is subject, is in danger of imagining the presence of highly abstract notions where much simpler mental processes actually take place. A comparatively easy way of getting oneself disentangled from these high-flown interpretations and of ascertaining what is the intellectual minimum really involved in these types of behavior, is to examine them in the least developed men known to us, or, better still—if they are to be found there—among animals. Let us accordingly turn for a moment to animal behavior with the intention of determining what ideas of power, or of agency, are involved in their modes of action, and thus take a preliminary step towards the solution of our problem.

Apes, dogs, beavers, in fact all the higher animals, show by their behavior a 'working understanding' of the more common physical forces. They estimate weight, resistance, heat, distance, etc., and adapt their actions more or less exactly to these factors when climbing, swinging at the end of boughs, breaking, carrying, etc. I remember observing a chimpanzee trying to recover a stick which had fallen through the bars of his cage and rolled beyond the reach of his arm. He looked around, walked deliberately to the corner of the cage picked up

a piece of burlap, and threw the end of it over the stick. Then, pulling gently, he made the stick roll until near enough for him to get hold of it with his hand. This ape dealt successfully with physical forces. Towards animals and men, animal behavior is quite different. A dog will beg from a man; he will not beg from a ham suspended out of his reach. Towards animals and men, animal behavior is similar to that of men when dealing with invisible anthropopathic beings.

One may well believe that the inner experiences of animals differ in these modes of behavior as much as their external movements. The feelings and emotions which appear in a dog's intercourse with his master are of the same species, if not of the same variety, as those felt by man when he deals with his fellow-men and with superhuman beings. Certain highly gifted animals feel blame and approbation, independently of physical punishment or reward, and attach themselves to their masters with a devoted affection possessing all the marks of altruism. The higher animals do, then, without any doubt, practise both the mechanical and the anthropopathic types of behavior, but they exercise the latter only towards *actually present* persons or animals. We shall have to consider subsequently the significant psychological difference to which this fact points.

But, is there no trace in animal life of the coercitive behavior? I know of none, though some perplexity might be caused by certain reactions animals learn under the tuition of man. What shall be said, for instance, of a dog who has learned to raise its forepaws when he wishes to be liberated from confinement under circumstances making the person causing the door to open invisible to him? Is this magical behavior? There is certainly no quantitative nor any qualitative relation between lifting up the forepaws and the opening of a door, neither is there any visible continuity between cause and effect. That the dog's action is not determined, in this instance, in the same way as that of a magician, appears when it is observed that whereas the latter would perform the same magical rite in a great variety of external circumstances, the dog will seek liberation by lifting its paws only when in the particular cage in which he has learned the trick, or in one very much like it.<sup>1</sup> But more about this pres-

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<sup>1</sup> H. B. Davis has this to say on the power of generalization of the raccoon, a very intelligent animal: 'When an animal [raccoon] is forced to approach a new fastening from a new direction, it is often as much bothered by it as by a new fastening. Nevertheless, in course of time the animals seem to reach a sort of generalized manner of procedure which enables them to deal more promptly with any new fastening (not too different from others of their experience).' 'The Raccoon: A Study in Animal Intelligence,' *Amer. Jr. of Psy.*, Oct., 1907, p. 486.

ently. It is not to be overlooked that without the interference of man, the dog would never have learned to perform this quasi-magical trick. This illustration serves, if no other purpose, at least to indicate how apparently slight is the impediment which prevents the higher animals from setting up a magical art.

It may be a matter for astonishment that two complicated and effective modes of reaction are arrived at by animals in the absence of abstract ideas about forces. Yet, so it is; before any speculation on power, before any induction or deduction, before any abstract notion of the nature of spirit and matter, animals have learned to deal quite well with what we call physical and personal forces. How did they do it? The study under experimental conditions of the establishment of new reactions in animals reveals the process very clearly. Imagine a cat shut up in a box, the door of which can be opened by pressing down a latch. When weary of confinement the cat begins to claw, pull, and bite, here, there, and everywhere. After half an hour, or an hour of this purposive, but unreasoned, activity, he chances to put his paw upon the latch and escapes. If again put into the cage, he does not seem to know any better than before how to proceed. Yet, something has been gained by the first experience. For now he directs his clawing, pulling, and biting more frequently towards the part of the cage occupied by the latch. Because of this improvement he finds himself released sooner than the first time. The repetition of the experiment shows the cat learning to bring his movements to bear more and more exclusively upon the door or its immediate surroundings. Ultimately he will have learned to make just the necessary movement and no other. In this gradual exclusion of useless movements, the cat is guided entirely by results. The psycho-physiological endowment required for acquisitions of this kind involves no abstract ideas but (1) the desire to escape; (2) the impulse and ability to perform the various movements we have named; (3) an indefinite remembrance of the position occupied when success was achieved, combined with a tendency to repeat the same movements when in the same situation.

The method illustrated above by which animals learn to deal with forces in the midst of which they live has a much wider range of application in human existence than is generally supposed. Man's fundamental mode of learning is also the unreflective, experimental, one in which frequent blind attempts and chance successes slowly lead to the elimination of ineffective movements. Would you convince yourself of the vastly exaggerated rôle ascribed to abstract ideas and to logical processes in ordinary human behavior, inquire how 'power' is

conceived of by those who use it. What is in the mind of the stoker when he thinks of the power of coal? What is in the mind of the gambler when he tries to coerce fate? What is in the mind of the necromancer when he summons the shades of spirits? Nothing definite beyond a knowledge of what is to be done in order to secure the desired results and the anticipation of these results themselves. The stoker thinks of what he sees and feels: the coal, in burning, gives heat; the heat makes the water boil; the steam pushes the piston-rod, and so forth. Each one of the successive links in the chain is vaguely thought of by him as striving to bring about the following one. That is how he understands the coal-power. And what does the ordinary person know, for instance, about electricity? Simply what is to be done in order to start the dynamo, light the lamp, switch the current, and what the effect will be in each case, nothing more. The superstitious person, whether belonging to a primitive tribe or to the Anglo-Saxon civilization of the twentieth century, understands in no other than this practical way the forces he deals with. I remember the delight shown by an elderly lady when a brood of swallows fell down our sitting-room chimney. 'It will bring luck to the household,' said she. I did my best, patiently and in several ways, to ascertain the sort of notion the lady had regarding the nature of the power that was to bring about the fortunate events predicted, and also to discover her idea of the connection existing between the fall of the swallows and the exertion of the 'power' in our behalf. I had to come to the conclusion that there was no idea whatsoever in her mind beyond those expressed by 'swallows-down-the-chimney' and 'happy-events-coming.' These two ideas were in her mind directly associated. When I declared my inability to see the causal connection between the two, she complained of my abnormal critical sense! Nothing more than the immediate association of an antecedent with its consequent need be looked for in the mind of most civilized, superstitious persons, and, of course, nothing more in the mind of a savage. That is sufficient for practical purposes.

The words 'matter' and 'spirit' wield a very considerable influence among us; what do they mean to most of those who use them? Physical science ascribes either extension alone, or extension and weight, to physical substances. Non-material forces are, then, according to science, both spaceless and weightless. I will venture to affirm that not one educated person in a thousand is acquainted with this distinction. Most of the few who have known it have forgotten it. So that the words 'matter' and 'spirit' mean different things to the philosopher and to the layman. In the popular mind, if spirits

are not perceptible it is because the senses are not sufficiently acute. Spirits are here or there, diffused over wide areas or concentrated in narrow spaces. The average Christian, whatever he may say to the contrary, is, theoretically speaking, a materialist, and, I might add, a polytheist. Whatever matter and spirit mean to him, and they certainly have a substantial meaning, the distinction made by the philosopher is for him non-existent. The following facts may be of some interest in this connection. A few years ago, in a conversation with a shop-clerk, I happened to mention a lead coffin made hermetic with solder. He was shocked, and objected to a dead body being shut up in a coffin of that description because it prevented the escape of the soul. This man had had an ordinary grammar-school education. Here are two quotations taken from answers of American College students to questions requesting a description of their idea of God. It should be added that the questions were given only to classes which had not yet taken up, or were just beginning the study of philosophy. 'God, to me, is a being of flesh and blood, for without this form he would seem unnatural and unsympathetic as our leader.' (Female, twenty years old.) 'I think of God as real, actual flesh and blood and bones, something we all shall see with our eyes some day.' (Male, twenty-one years old.) Together with these, and from the same classes of students, came a great number of very different answers; for instance this, 'God is an impersonal being. . . . I think of him as the embodiment of natural laws.' Descartes's conception may serve as a point of comparison: 'What the soul itself was, I either did not stay to consider, or, if I did, I imagined that it was something extremely rare and subtle, like wind or flame, or either, spread through my grosser parts.'<sup>1</sup>

If the philosophical distinction between matter and spirit is not ordinarily made, these terms express none the less a very definite practical meaning of prime importance: they mark the difference between forces that are not responsive to psychic influences (desire and emotion, ethical and æsthetic considerations) and those that are.

The trial-and-error method which serves to establish the efficient modes of behavior observed in animals, is so far-reaching in its possibilities that one might be tempted to regard it as accounting for the existence of Magic and of Religion. Were this theory tenable, the origin of the three modes of human behavior would have been brought back to one method of learning, the unreasoning, trial-and-error method. But, even a superficial consideration discovers insuperable obstacles

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<sup>1</sup> *Meditationes*, ii, p. 10, Amsterdam, 1678.



in the way of this enticingly simple explanation, and compels the admission that magical art and Religion involve the operation of mental powers not required for the establishment of the mechanical, and of the non-religious anthropopathic behaviors.

The first of the two differences I intend to bring out, is that if a particular action is to be learned by an animal, the gratification of the actuating desire must follow immediately, or nearly so, upon the performance of the successful act, and be frequently repeated at short intervals; whereas in man, as far as Magic and Religion are concerned, the results may follow quite irregularly upon the performance, often only long after, and, not infrequently, not at all. Had not the door opened every time the cat pressed the latch, but, let us say, only once every ten times, or, if every time, one week after the movement, he would never have learned to make his escape. No more would he have acquired the trick, had he not been placed in the cage repeatedly and at short intervals. An interesting instance of the gradual undoing of a habit in consequence of the absence of the sensory results for the sake and under the guidance of which the action had been learned, is reported by Lloyd Morgan.<sup>1</sup> He had brought up in his study a brood of ducks. They had had a bath every morning in a tin tray. After awhile, the tray was placed empty in its accustomed place. The ducks got into it and went through all their ordinary ablutions. The next day, they again enjoyed the missing water, but not as long as on the first day. On the third day they gave up the useless practice of bathing in an empty tray.

In three days ducklings eliminate a habit which has become useless, whereas generations after generations of men have gone through innumerable, time-wasting, often costly and painful ceremonies for results rarely secured, and, as we think, never directly secured by the magical or the religious ceremonies themselves. There is here a curious point of psychology: animals establish habits under the guidance of immediate results while man develops the magical art and Religion *despite* the usual absence of the results sought after. The very possibility of deceiving himself reveals the superiority of man over animals, for self-deception requires a degree of independence from sense-observation, a capacity of constructive imagination, a susceptibility to auto-suggestion, not to be found in animals. That the first glimmer of these capacities should have plunged man in the darkness of primitive Magic and Religion, and made him the ridiculous fool he appears to be by the side of the matter-of-fact, intelligent animal, is, however, a very striking and singular fact.

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<sup>1</sup>C. Lloyd Morgan: *Introduction to Comparative Psychology* (The Contemporary Science Series, 1894), p. 89.

If the constant and immediate appearance of the desired results does not seem necessary to the establishment of Magic and Religion, it should not be thought, however, that these arts are altogether useless. On the contrary, they are, even independently of the results at which they aim, of a most substantial value to the cause of individual and social development. Let it be said first concerning the expected results that they happen more frequently, perhaps, than I may have seemed to imply. When, for instance, the rain ceremonies are performed during a spell of dry weather, success, more or less distant, always crowns the efforts of the magicians: the rain does come and the earth does bring forth its fruits. The ceremonies for the healing of disease are often followed by the recovery of the patient, however absurd the treatment may have been. One should not forget, in this connection, the considerable effect of suggestion upon the credulous savage. Many cures are, no doubt, performed in this manner by the medicine-man. Davenport, speaking of tribes of Puget Sound, says: 'Their cure for disease consists in the members of the cult shaking in a circle about a sick person, dressed in ceremonial costume. The religious practitioner waves a cloth in front of the patient, with a gentle fanning motion, and, blowing at the same time, proceeds to drive the disease out of the body, beginning at the feet and working upward. The assistant stands ready to seize the disease with his cloth when it is driven out of the head! And they are able to boast of many real cures.'<sup>1</sup> A psychologist is not inclined to doubt the report of Curr, that among the aborigines of Victoria persons who knew themselves to have been devoted to destruction with magical ceremonies have pined away and died,<sup>2</sup> nor that of Howitt, who, alluding to the habit of the medicine-men of certain tribes to knock a man insensible in order to remove the kidney fat for magical purposes, writes, 'In the Kurnai tribe men have died believing themselves to have been deprived of their fat.'<sup>3</sup>

But the intended results form only a part, and that perhaps not the most important, of the gains to be credited to the practice of Magic and Religion. The most noteworthy of these unsought by-products are:— (1) The gratification of the lust for power. The Magician and the Priest are mediators between superior, mysterious powers and their fellow-men.

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<sup>1</sup>F. M. Davenport; *Primitive Traits in Religious Revivals*, Macmillan (1905), p. 36: quoted from the Fourteenth Annual Report of the [Amer.] Bureau of Ethnology, p. 761.

<sup>2</sup>E. M. Curr: *The Australian Race*, iii, p. 547, as quoted by Frazer, *Golden Bough*, 2nd ed., i, p. 13.

<sup>3</sup>A. W. Howitt: *The Native Races of South-East Australia* (1904), p. 373.

The sense of mastery over, or communion with, these powers, and the respect and fear with which Magicians and Priests are regarded, are, of themselves, almost sufficient to keep up these practices. (2) Both these modes of behavior, but especially Magic, appeal to the gambling instinct. All men crave excitement; the savage is no exception. In the daring game in which the rain-maker or the disease-healer engages, the high tension of the gambling-table is, to a certain extent, present. (3) Less obvious, perhaps, than the preceding advantages, but not less valuable, is the general mental stimulation induced by Magic and Religion. Magic is the great social play of the savage. If animal plays serve a highly valuable purpose in affording practice in sense-observation and motor-co-ordination, Magic makes its chief call upon the imagination; in this consists one of its most far-reaching values. It becomes a training for the achievement of those higher mental syntheses requiring the momentary disregard of the actual sense-impressions, from which it is so difficult to liberate oneself, in behalf of the accumulated experience of a whole life.

The second objection to the assumption that the trial-and-error method could have led to the establishment of magical and religious habits, arises from the inability of animals to act towards unperceived objects as if they were actually present. A dog never welcomes by gambols or licks the hand of an absent friend while Religion, and at times Magic, show primitive man in more or less systematic relations with powers he has never sensed. When the Shaman draws lines upon the sand, describes various curves with his arms, utters sundry incantations, he does not address a power he perceives, nor even one he has really seen, although he may believe that he, or some one else has seen it. That animals are moved to action by memories of past perception is, of course, not open to doubt. Their whole life is a long testimony to that ability. Any one will recall instances of chains of concerted actions indicating clearly, on the part of some one of the higher animals, domesticated or wild, the anticipation of a particular person, object, or event. What they never do, is to behave as if the remembered object was really present, though not sensed. H. Spencer, discussing adversely A. Comte's opinion that fetichistic conceptions are formed by the higher animals, relates the following observation concerning a retriever who had learned for herself to perform 'an act of propitiation.' She had associated the fetching of game 'with the pleasure of the person to whom she brought it', and so, 'after wagging her tail and grinning, she would perform this act of propitiation as nearly as practicable in the absence of a dead bird. Seeking about she would pick up a dead leaf, a bit of paper, a twig, or other small object

and would bring it with renewed manifestations of friendliness. Some kindred state of mind it is, which I believe, prompts the savage to certain fetichistic observances.<sup>1</sup> So far the dog could go, but she could not have imagined the presence of an unseen being and behaved toward him in the same manner. Another significant point is that the absent objects towards which animals may direct their actions are always, so far as one may judge, identical with those actually sensed by them at some time, *i. e.*, their behavior never shows that they have transformed, imaginatively, objects with which their senses have made them familiar. Whereas, man can not only believe in the presence of unseen objects, but he can also imagine beings never actually sensed by him, and behave towards them according to the traits and capacities with which he has endowed them.

There are observations on record which compel the qualification of the assertion, I may have seemed to make in the preceding paragraph, of a clean break between man and animals. Certain dogs are thrown into paroxysms of fear by peals of thunder, and run into hiding. Darwin relates how his dog 'full grown and very sensible,' growled fiercely and barked whenever an open parasol standing at some distance was moved by a slight breeze. He is of the opinion that the dog 'must have reasoned to himself in a rapid and unconscious manner, that movement without any apparent cause indicated the presence of some strange living agent, and that no stranger had a right to be on his territory.'<sup>2</sup> Romanes, in a short and interesting paper entitled 'Fetichism in Animals,'<sup>3</sup> after reporting the preceding illustration, relates this observation touching a remarkably 'intelligent,' 'pugnacious' and 'courageous' dog. 'The terrier [Skye] in question, like many other dogs, used to play with dry bones, by tossing them in the air, throwing them to a distance, and generally giving them the appearance of animation, in order to give himself the ideal pleasure of worrying them. On one occasion, therefore, I tied a long and fine thread to a dry bone, and gave him the latter to play with. After he had tossed it about for a short time, I took an opportunity, when it had fallen at a distance from him, and while he was following it up, of gently drawing it away from him by means of the long and invisible thread. Instantly his whole demeanor changed. The bone which he had previously pretended to be alive, now began to look as if it really were alive, and his astonishment knew no bounds. He first approached

<sup>1</sup>*Principles of Sociology* (3d edition, 1885), i. Appendix A, p. 788.

<sup>2</sup>*The Descent of Man*, 2d ed., i, p. 145.

<sup>3</sup>*Nature*. xvii (1877-1878), pp. 168-169. Comp. Lloyd Morgan, *Introd. to Comparative Psychology*, p. 92 ff.

it with nervous caution as Mr. Spencer describes, but as the slow, receding motion continued, and he became quite certain that the movement could not be accounted for by any residuum of the force which he had himself communicated, his astonishment developed into dread, and he ran to conceal himself under some articles of furniture, there to behold at a distance the uncanny spectacle of a dry bone coming to life.' Certain instances of instinctive fear of harmless things may help to interpret the preceding observations. G. Stanley Hall mentions a little girl who would scream when she saw feathers floating through the air. To keep another child in a room, it was sufficient to place a feather in the keyhole.<sup>1</sup>

Shall we hold that these animals interpreted the unusual experiences reported above as the work of hidden beings of the kind known to them, or shall we agree rather with Lloyd Morgan, Romanes, Spencer, and others, in thinking that their behavior indicated merely surprise, astonishment, and fear at the unexpected movements of familiar objects? That explanation is probably sufficient. The failure of an object to fit in with the psycho-physiological attitude of expectation which past experience has taught us to assume brings about the sudden disturbance called surprise, astonishment or fear. It is in substance what would happen to any person if, on opening his bed in the dark, his hands came in contact with some object concealed in it. Personalization of the unexpected object is not necessary to cause fright. And yet, who shall say that in none of these instances is there anything corresponding to the anthropomorphic interpretation of natural events so common among men of low culture? Does not the growling of Darwin's dog indicate as much? It would seem to mean an unjustifiably dogmatic assertion to affirm that no animal can think of thunder as caused by a being like those with which his senses have made him familiar. Were he to do so, he would do as the savage who projects his ordinary notion of animated beings behind inanimate phenomena. Creative imagination is not any more required for such an interpretation than for the belief in survival after death when it is suggested by apparitions in dreams or trances. It is quite in point, at any rate, to affirm that man and beasts are much nearer to each other, regarding the possibility of interpreting animistically certain striking natural events, than most people are willing to admit.

The most significant difference between men and animals is not found in the fact that animals may be unable to interpret animistically certain striking natural phenomena—an opinion

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<sup>1</sup>*A Study in Fears, Am. Jour. of Psy.* (1897), viii, p. 166.

open to question—but in their inability to *fix* by means of communicable signs any fleeting animistic interpretation which might chance to cross their mind. Without the advantage conferred by speech upon even the lowest savages to hold, clarify, keep alive, and bring to fruition impressions of this evanescent nature, I do not see how a stable belief in animism could have been established. The decisive rôle played by language appears forcibly when one considers the part it takes in introducing dream experiences into waking life. The baffling evanescence of dreams caught sight of on awakening is familiar to every one. Unless clothed in linguistic form they are soon completely lost; verbal expression makes them part and parcel of our mental possessions.

Animals practice the mechanical and the anthropopathic behavior but, the latter, only towards beings present to their senses. Religion—anthropopathic behavior towards unperceived and, in lower religions at least, always personal powers—and Magic—the art of making use of an impersonal, non-mechanical power, to coerce things or persons—are found only in man. This fateful difference between animal and man is due to the latter's relative independence from slavery to sense-impressions. He is able (1) not only to sporadically imagine unseen personal agents but, thanks to speech, to keep their existence in mind, and (2) to establish and maintain practical relations with these imagined unseen beings, as well as to make use of suppositious impersonal forces, in the face of delayed and of oft-repeated failures on their part to produce what is expected of them.